EXHIBIT A

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.	:	10/056,662	Confirmation No. 9818
Applicant	:	Daniel J. Benedict and Lorna S. Mosse	
Filed	:	01/23/2002	
TG/A.U.	:	1651	
Examiner	:	Leon B. Lankford Jr.	
Docket No.	:		
Customer No.	:	26357	

DECLARATION UNDER RULE 132

I, Daniel J. Benedict, do hereby declare and say:

My residence address is Chicago, Illinois.

I am one of the inventors of the subject application.

I have a Bachelor of Science degree in Chemical Engineering and a Masters of Science degree in Chemical Engineer from the Illinois Institute of Technology. I have worked with in chemical engineering, bioprocessing, and biomedical engineering.

I have worked with research physicians involved in islet isolations. These include islet isolations at the University of Chicago Medical School and the University of Memphis at Tennessee.

I have also engaged in collaborative communication with other research groups in islet transplantation which include the University of Washington, the University of Minnesota, and the University of Alberta.

Based on the above description of my educational background and work experience, I am an ordinary practitioner of the art of islet isolation.

I have studied the references cited by the Examiner and I am of the opinion that the amended and new claims are not anticipated by or obvious in view of those references. While it is true that some of the individual elements of our invention are described in the prior art, no one has suggested the combinations and/or uses of those elements that we are claiming. Just because sensors, controllers and pumps exist (and air, fire and water, for that matter), does not show that the combinations and uses we are claiming have been discovered.

Statements made by experts in the art before and after our patent application was filed show that the art had not solved the problem of automating the islet isolation process. Expert research physicians made presentations at the XVIII International Congress of the Transplantation Society, August 27 - September 1, 2000 in Rome, Italy. In a presentation entitled "Advances in Pancreatic Islet Cell Transplantation" presented by Bertram Kasiske, MD, in the section "Standardization of Islet Separation Technology: Current Challenges" and the subsection "Developing an Automated Method," Dr. Kasiske stated that "The development of a

standardized, reproducible, and automated method to isolate and purify high-quality islet cells is very important to the future success of islet transplantation."

http://www.medscape.com/viewarticle/418979 This statement by an expert in the field was made just one year prior to the filing date of our provisional patent application. It is evidence that our claimed invention was not obvious to those skilled in the arts of research medicine and islet transplantation when our patent application was filed.

Significantly, a recent review (published in 2003 - two years after we filed our provisional application) from the University of Miami, Miller School of Medicine (the host of the Diabetes Research Institute -DRI), under the section "Islet Cell Resource Center" and the subsection "The objective of the Islet Cell Resource (ICR) Center," the following statement is made: "The specific aims of this collaborative effort are to: to optimize isolation procedures to obtain high yields of functional islet cells and to develop isolation, ... procedures that result in maximum islet cell function upon transplantation,' however, there is no mention that the collaborative effort will use a process control interface and automatically control islet processing parameters. This statement also shows our claimed invention was not obvious to those skilled in the art in 2003. Our claimed invention does not merely automate a manual method of isolation, but identifies and controls process control variables (biologically based processing variables) that affect the potency, viability, and functionality of the isolated islets.

I believe that our patent application, when filed, contained sufficient information regarding the subject matter of the claims as to enable one skilled in the pertinent art to make and use the claimed invention. I believe that undue or unreasonable experimentation would not be required

to practice our claimed process and apparatus. All of the sensors, assay techniques and compositions cited in the claims are commercially available, but they have never been combined in the way that we have invented. The disclosure of our patent application complies with suggestion of MPEP that "A patent need not teach, and preferably omits, what is well known in the art."

For example, on the filing date of our application, one skilled in the art would have known that endotoxin concentration can be measured using the Limulus Amebocyte Lysate (LAL) assay and that the Pyros Kinetix instrument for performing this assay is available from Associates of CAPE COD, Inc. http://www.acciusa.com/lal/pyros_kinetix.html This assay was mentioned in the Vargas et al. paper that was incorporated by reference into our application.

Similarly, on the filing date of our application, one skilled in the art would have known that endotoxin neutralizing protein (ENP) is commercially available at Associates of CAPE COD, Inc. http://www.acciusa.com/search.html?searchterm=pyros+kinetix (see reference 6 on this web page). One skilled in the art would have also have known ENP can be purchased from PharmCanada, http://www.pharmcanada.net/Research%20products.htm#enp

Paragraph [0015] of the specification states that endotoxin concentration is one among "identified process variables that influence the islet separation process" and that "controlling the variables that influence the reproducibility and repeatability of the islet separation process". Paragraph [0017] states that "a process variable is the endotoxin concentration" and paragraph [0021] states that "the endotoxin concentration is monitored,

recorded, and controlled in real time". Paragraph [0022] states how the process sensor signals are routed through the process control interface to a process controller, and paragraph [0027] states that "process variable setpoints" are used to control endotoxin concentration as does paragraph [0032].

On the filing date of our application, one skilled in the art would have known that Liberase® (made by Roche) is a preferred proteolytic enzyme (collagenase) for use human and porcine islet isolation. Initially, an appropriate proteolytic enzyme activity is calculated for the mass of the pancreas, so no more needs be added during the islet isolation process. During the dilution and collection phase of islet isolation, the proteolytic enzyme activity is preferably controlled by reducing its activity by chelating or deactivating it with an antibiotic.

Paragraph [0018] of the specification states that "methodology is employed to control, deactivate, and inhibit the digestive effects of proteolytic enzymes and tissue dissociating agent collagenase (Liberase), protecting the islets from unnecessary degradation during dilution and collection." It may be deactivated through chelation or an antibiotic concentration, which inhibit its digestive (tissue degrading) effect.

On the filing date of our application, one skilled in the art would have known that sensors are commercially available that are capable of measuring dissolved oxygen, dissolved nitric oxide, and dissolved carbon dioxide. For example, a nitric oxide sensor and instrument is commercially available from World Precision Instruments, Inc.
http://www.wpiinc.com/WPI_Web/Biosensing/Apollo.html

In summary, the prior art does not anticipate or render obvious our claims and the subject matter of our claims that is not known in the art finds support in the application as filed.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application and any patent issued thereon.

Signed:

Daniel J. Benedict

Daniel J. Benedict

Dated: 3/10/05

EXHIBIT B

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Customer No.	:	26357	

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I, Lorna S. Mosse, do hereby declare and say:

My residence address is Chicago, Illinois.

I am one of the inventors of the subject application.

I have a Bachelor of Arts degree in Biology and a Masters of Science degree in Biology from the Illinois Institute of Technology. I have worked in biology, microbiology, and molecular biology.

I have engaged in collaborative discussion with research groups in islet transplantation which include the University of Chicago Medical School and the University of Washington.

Based on the above description of my educational background and work experience, I am an ordinary practitioner of the art of islet isolation.

I have studied the references cited by the Examiner and I am of the opinion that the amended and new claims are not anticipated by or obvious in view of those references. While it is true that some of the individual elements of our invention are described in the prior art, no one has suggested the combinations and/or uses of those elements that we are claiming. Just because sensors, controllers and pumps exist (and air, fire and water, for that matter), does not show that the combinations and uses we are claiming have been discovered.

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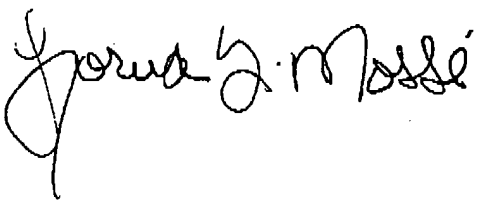
Signed:



Lorna S. Mosse

Dated: 3/10/05